



Implementation of the Problem-Based Learning Model with Puzzle Media to Improve the Learning Outcomes of Fourth-Grade Students on Q.S. At-Tin Material at SD Negeri 053998 Bukit Jengkol

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Abstract:

This study aims to improve the learning outcomes of fourth-grade students on the Q.S. At-Tin material through the implementation of the Problem-Based Learning (PBL) model with puzzle media at SD Negeri 053998 B. Jengkol. The research method used is Classroom Action Research (CAR), which consists of three stages: pre-cycle, Cycle I, and Cycle II. Data were collected through learning outcome tests and observations of student activities during the learning process. The results indicate that implementing the PBL model with puzzle media significantly enhances students' learning outcomes. In the pre-cycle stage, most students had not yet achieved learning mastery. After the intervention in Cycle I, there was an improvement in students' understanding and engagement in learning. By Cycle II, nearly all students had reached the mastery level. This improvement demonstrates that using the PBL method with puzzle media enhances students' comprehension of the Q.S. At-Tin material while making the learning process more engaging and interactive. Thus, it can be concluded that the Problem-Based Learning model with puzzle media is an effective instructional strategy for improving students' learning outcomes in Islamic Religious Education.

Keywords: Problem-Based Learning, Puzzle Media, Learning Outcomes, Q.S. At-Tin, Fourth-Grade Students.

INTRODUCTION

Education plays a crucial role in shaping high-quality human resources. In modern education, various innovations in teaching methods are required to encourage students to be more active, creative, and critical in understanding the material being taught. According to Dewey (1938), effective learning involves direct experience, where students do not passively receive information but actively participate in finding solutions to given problems. This aligns with the concept of Problem-Based Learning (PBL), which emphasizes problem-solving as the core of the learning process. The Problem-Based Learning (PBL) model was first introduced by Barrows (1986) in medical education and later expanded into various disciplines, including primary education. PBL focuses on presenting real-world problems that students must solve through discussion, exploration,

and critical analysis. According to Hmelo-Silver (2004), this method enhances conceptual understanding, critical thinking skills, and students' independence in learning. In the context of Islamic Religious Education (PAI), the implementation of PBL can help students gain a deeper and more applicable understanding of Qur'anic values.

One of the essential topics in PAI is understanding Q.S. At-Tin, which conveys messages about human dignity and the importance of faith and good deeds. However, in reality, many students struggle to comprehend the meaning and essence of Qur'anic verses. According to Sanjaya (2010), one of the factors contributing to low student achievement is the conventional teaching approach, where teachers predominantly use lectures without actively involving students. As a result, students become less motivated and struggle to relate the material to their daily lives. To address this issue, the use of engaging learning media is essential. One effective medium for PBL-based learning is puzzles. According to Arsyad (2016), instructional media such as puzzles can enhance memory retention, make learning more enjoyable, and encourage social interaction in the classroom. Additionally, research by Bransford, Brown, and Cocking (2000) suggests that game-based or interactive media-based learning increases student engagement and facilitates better understanding of concepts.

The implementation of the PBL model with puzzle media is expected to improve students' understanding of Q.S. At-Tin in a more enjoyable and challenging way. Puzzles allow students to actively search for and assemble pieces of information, enabling them to develop a deeper comprehension of the content and messages in Q.S. At-Tin. According to Slavin (2006), learning that involves both physical and cognitive activities is more effective in enhancing memory retention and conceptual understanding. Moreover, this method can also boost students' learning motivation. According to Deci and Ryan (1985) in the Self-Determination Theory (SDT), students are more motivated to learn when they feel a sense of control over their learning process. By implementing PBL with puzzle media, students are given opportunities to explore the material independently and collaborate in groups, making them feel more responsible for their own learning.

Based on the issues outlined, this study aims to implement the Problem-Based Learning model with puzzle media to enhance the learning outcomes of fourth-grade students at SD Negeri 053998 Bukit Jengkol on the topic of Q.S. At-Tin. Through this research, it is expected that students will become more active in learning, develop a better understanding of Q.S. At-Tin, and be able to apply its values in their daily lives. With innovations in teaching methods, this study is expected to contribute to the development of more effective Islamic Religious Education (PAI) teaching strategies. Furthermore, the findings of this research can serve as a reference for teachers in implementing more interactive and engaging learning approaches, ultimately improving the overall quality of education.

METHODS

This study focuses on the provision of learning facilities, which include the costs of procuring puzzle media, printing materials, and stationery used in the research implementation. The approach employed is Classroom Action Research (CAR) as developed by Kemmis and McTaggart (1988), as this model enables systematic improvement of learning through several cycles consisting of planning, action implementation, observation, and reflection. This research adopts the CAR model, aiming to enhance students' learning outcomes through the implementation of the Problem-Based Learning (PBL) model with puzzle media in the study of Q.S. At-Tin. The research subjects comprise 20 fourth-grade students at SD Negeri 053998 B. Jengkol, Pangkalan Susu Subdistrict, Langkat Regency, selected based on their low learning achievement in understanding Q.S. At-Tin and the lack of variation in teaching methods. The research design was conducted in two cycles, each consisting of four main stages: planning, which involves preparing learning tools, developing puzzle media, and preparing research

instruments; implementation, which applies the PBL model using puzzle media; observation of student activities and learning outcomes measurement; and reflection to evaluate and determine improvements for the next cycle. The research phases begin with a pre-cycle stage to assess students' initial learning outcomes and identify learning difficulties, followed by Cycle I, which applies the PBL model with puzzle media, observes students' responses, and analyzes early learning outcomes. Cycle II then refines the learning method, observes changes, and conducts a final analysis of the effectiveness of the PBL model with puzzle media. The research instruments used include learning outcome tests to assess students' comprehension, observation sheets to record student activities during the learning process, and questionnaires to gather students' feedback on the applied method. Data analysis was conducted using both quantitative and qualitative descriptive approaches, where quantitative analysis compared pre- and post-test results using the N-Gain Score to measure learning improvement, while qualitative analysis was carried out through data reduction, data presentation, and conclusion drawing based on the model by Miles & Huberman (1994). With the implementation of this method, it is expected that students' learning outcomes in understanding Q.S. At-Tin will improve significantly, aligning with the constructivist learning theory proposed by Piaget (1950) and Vygotsky (1978), which emphasizes the importance of active student involvement in the learning process.

RESULTS

This study aims to analyze the effectiveness of the Problem-Based Learning (PBL) model with puzzle media in improving the learning outcomes of fourth-grade students on the subject of Q.S. At-Tin at SD Negeri 053998 Bukit Jengkol. The PBL model was chosen based on Barrows' (1986) theory, which states that problem-based learning enhances students' conceptual understanding and critical thinking skills. In this study, the implementation of the PBL model with puzzle media is expected to make learning more engaging, interactive, and easier for students to comprehend.

The results of the study indicate an improvement in students' learning outcomes from the pre-cycle to cycle II. During the pre-cycle stage, most students struggled to understand the material on Q.S. At-Tin due to the conventional teaching method, which lacked direct student involvement. This aligns with Slavin's (2006) findings that passive learning often leads to lower student engagement and motivation to deeply understand concepts.

After implementing the Problem-Based Learning (PBL) model with puzzle media in cycle I, student engagement in the learning process increased. Students became more active in discussing the content and meaning of Q.S. At-Tin as they were given problems to solve in groups. Hmelo-Silver (2004) explains that in PBL, students are trained to solve problems by exploring, analyzing, and discussing various relevant concepts. This proved to enhance student motivation in understanding the material.

However, despite the improved learning outcomes in cycle I, some challenges remained, such as certain students not fully grasping the concepts and still relying on teacher assistance in assembling puzzles. This corresponds with Vygotsky's (1978) research on the Zone of Proximal Development (ZPD), which suggests that in the early stages of learning, students require guidance from teachers or peers to reach higher understanding. Therefore, improvements were made in cycle II with more intensive support and structured guidance.

In cycle II, students' learning outcomes showed a more significant increase compared to the previous cycle. Students became more independent in completing the puzzle-based challenges and were able to explain the meaning of Q.S. At-Tin more effectively. These findings are in line with Bruner's (1961) research, which emphasizes the importance of Discovery Learning, where students learn more effectively when they discover concepts through active exploration.

Furthermore, observational data revealed that the PBL model with puzzle media improved collaboration and communication among students in learning. This is supported by Johnson & Johnson's (1999) Cooperative Learning theory, which states that cooperative-based learning enhances student learning outcomes through positive social interactions. In this study, students appeared more enthusiastic and enjoyed completing tasks as they learned in small, supportive groups.

Survey results also indicated that most students found it easier to understand the material using puzzle media. They felt more challenged and excited about learning compared to traditional lecture methods. This aligns with Piaget's (1952) cognitive development theory, which states that elementary school children learn more effectively through direct and manipulative experiences.

Based on these findings, it can be concluded that the implementation of Problem-Based Learning with puzzle media positively contributes to improving fourth-grade students' learning outcomes on the subject of Q.S. At-Tin. This model not only enhances conceptual understanding but also helps students develop critical thinking skills, cooperation, and learning independence. Thus, the PBL model with puzzle media is recommended as an effective teaching strategy in Islamic religious education at the elementary school level.

The following table illustrates the improvement in students' learning outcomes after implementing Problem-Based Learning (PBL) with puzzle media in teaching Q.S. At-Tin in the fourth grade at SD Negeri 053998 Bukit Jengkol.

Table 1. Improvement in Student Learning Outcomes

Learning Stage	Number of Students Achieving Mastery (≥ 70)	of Mastery Percentage (%)	Number of Students Not Achieving Mastery (< 70)	Non-Mastery Percentage (%)
Pre-Cycle	10	50%	10	50%
Cycle I	15	75%	5	25%
Cycle II	19	95%	1	5%

Data Analysis:

In the pre-cycle stage, only 10 students (50%) met the minimum mastery level (≥ 70), while 10 students (50%) did not, indicating that conventional teaching methods were less effective in improving student comprehension.

In cycle I, after implementing Problem-Based Learning (PBL) with puzzle media, the number of students achieving mastery increased to 15 students (75%), while 5 students (25%) still faced difficulties.

In cycle II, students' learning outcomes improved more significantly, with 19 students (95%) achieving mastery and only 1 student (5%) failing to meet the minimum standard.

From the data above, it can be concluded that the gradual implementation of Problem-Based Learning with puzzle media successfully enhanced student learning outcomes. This improvement suggests that problem-based learning methods accompanied by interactive media are more effective than conventional methods.

In this study, data verification was conducted to ensure that the results obtained from implementing Problem-Based Learning (PBL) with puzzle media were valid and scientifically accountable. Data verification aims to evaluate the accuracy of research findings through various techniques, such as triangulation, reliability testing, and validation of student learning outcomes. Creswell (2012) asserts that data validity in educational research is crucial to ensure that research findings reflect the actual reality in the field.

The first verification was performed using the triangulation method, which compares results from multiple data sources. In this study, triangulation was conducted through three approaches: methodological triangulation, source triangulation, and time triangulation. Denzin (1978) explains that methodological triangulation involves using

multiple data collection techniques, such as learning outcome tests, observations, and interviews with teachers and students. This ensures that the collected data is robust and not solely dependent on one technique.

The second verification involved reliability testing, ensuring that the research findings were consistent and reproducible under similar conditions. Gay, Mills, & Airasian (2011) state that reliability in educational research can be measured by examining consistent patterns of learning improvement from one cycle to the next. In this study, student learning outcomes showed a consistent increasing trend from the pre-cycle to cycle II, indicating high reliability. Additionally, to avoid bias in data collection, this study also validated learning outcomes through item analysis and cross-checking between student scores and learning indicators. Fraenkel & Wallen (2009) state that learning outcome validation can be performed by assessing whether the instrument used truly measures what it is intended to measure. In this case, the tests given to students were designed according to the learning indicators of Q.S. At-Tin, ensuring that the results accurately reflected student comprehension.

Data verification also involved analyzing student engagement in the learning process. Observations indicated that after implementing PBL with puzzle media, students became more active and enthusiastic in learning. This aligns with Hmelo-Silver's (2004) findings, which state that problem-based learning enhances student participation as they feel more involved in solving real-world problems.

Feedback from teachers and students was also used as a form of data verification. The teachers provided positive assessments of the effectiveness of the method, while most students expressed that they better understood the material using puzzle media. This aligns with Slavin's (2006) theory, which explains that interactive learning approaches are generally more effective in improving student comprehension than lecture methods. Besides internal validity, this study also considered external validity, which refers to the extent to which the research findings can be generalized to a broader context. Based on the results, the PBL model with puzzle media can be an effective alternative for improving student learning outcomes in religious subjects at the elementary school level. Sugiyono (2017) states that external validity is achieved if research findings can be applied under similar conditions elsewhere.

With the various verification methods used, this research's findings can be deemed valid and reliable. The consistent improvement in student learning outcomes, triangulated data from multiple sources, and validated results through tests and observations support the conclusion that Problem-Based Learning with puzzle media enhances student comprehension of Q.S. At-Tin. Therefore, this teaching model is recommended for wider implementation in Islamic education at the elementary school level.

The results of this study indicate that the implementation of Problem-Based Learning (PBL) using puzzle media can improve the learning outcomes of fourth-grade students in the subject of Q.S. At-Tin. Based on the obtained data, there was an increase in the number of students achieving learning mastery from 10 students (50%) in the pre-cycle to 15 students (75%) in Cycle I, and further increasing to 19 students (95%) in Cycle II. This improvement demonstrates that the PBL method with interactive media is more effective compared to conventional teaching methods. Slavin (2006) explains that active learning involving problem-solving can enhance students' understanding and help them retain material more effectively.

In the pre-cycle stage, the initial test results showed that only 10 students (50%) achieved the minimum score of 70, while the remaining 10 students (50%) had not yet met the mastery criteria. This indicates that the previous teaching method was less effective in helping students understand the material in Q.S. At-Tin. Joyce & Weil (2009) state that the lecture-dominated conventional teaching method often results in low student engagement and a lack of understanding of the concepts being taught.

After implementing PBL with puzzle media in Cycle I, the number of students achieving mastery increased to 15 students (75%), while 5 students (25%) had not yet

met the criteria. This improvement indicates that the PBL model began to have a positive impact on students' learning outcomes. According to Hmelo-Silver (2004), problem-based learning can enhance students' cognitive engagement in the learning process as they are encouraged to think critically and solve problems independently or in groups.

In Cycle II, students' learning outcomes improved further, with 19 students (95%) achieving mastery, while only 1 student (5%) remained below the minimum score standard. This proves that using PBL with puzzle media can significantly enhance students' learning outcomes. Arends (2012) states that problem-based learning is effective in improving students' conceptual understanding as they actively participate in exploring concepts and applying knowledge.

In addition to learning outcomes, students' engagement in the learning process also showed improvement. In the pre-cycle, most students appeared passive and less involved in discussions. However, after implementing the PBL method with puzzle media, students became more enthusiastic in solving challenges presented through the puzzle game. Observation data showed that in Cycle I, about 70% of students actively participated in group discussions, which increased to 90% in Cycle II. This aligns with the research by Johnson & Johnson (2009), which states that cooperative learning strategies can enhance students' learning motivation and critical thinking skills.

The improvement in learning outcomes was also influenced by students' increased motivation after implementing the PBL method. Before the intervention, only about 55% of students showed interest in learning Q.S. At-Tin. However, after using puzzle media, this number increased to 85% in Cycle I and reached 95% in Cycle II. Piaget (1972) explains that elementary school children can better understand concepts when learning involves enjoyable and exploratory activities, such as educational games.

Although this study showed positive results, challenges remain in implementing PBL with puzzle media, especially at the initial stage. Some students initially struggled to understand the concept of group discussions and strategies for solving puzzles. However, with more intensive guidance from teachers, students were eventually able to adapt to the new learning model. Vygotsky (1978) emphasizes the importance of teacher roles and social interaction in helping students develop their understanding through scaffolded learning.

Overall, this study proves that using Problem-Based Learning with puzzle media can significantly enhance students' learning outcomes in Q.S. At-Tin. With an increase from 50% in the pre-cycle to 95% in Cycle II, it can be concluded that this method is highly effective in improving students' understanding. Therefore, this learning model is recommended for wider implementation in Islamic religious education at the elementary school level.

CONCLUSION

Based on the findings of this study, it can be concluded that the implementation of Problem-Based Learning (PBL) using puzzle media has successfully improved the learning outcomes of fourth-grade students in the subject of Q.S. At-Tin at SD Negeri 053998 B. Jengkol. The research results indicate a significant increase in the number of students achieving mastery, from 50% in the pre-cycle, rising to 75% in Cycle I, and reaching 95% in Cycle II. This demonstrates that the PBL method with interactive media has a positive impact on students' understanding. According to Slavin (2006), learning that involves problem-solving activities can enhance students' memory retention and help them grasp concepts more deeply. In the pre-cycle stage, only 10 out of 20 students (50%) achieved the mastery score, while the remaining 10 students (50%) were still below the minimum score standard. This indicates that the previous teaching method was less effective in helping students understand the material in Q.S. At-Tin. Joyce & Weil (2009) mention that conventional teaching models often make students passive and less engaged in the

learning process, which negatively affects their comprehension of the subject (95%) achieving mastery, while only 1 matter.

After implementing PBL with puzzle media, students' learning outcomes improved in Cycle I, where 15 out of 20 students (75%) achieved mastery, while the remaining 5 students (25%) had not yet reached the minimum score. This improvement proves that the problem-based approach helps students better understand concepts. According to Hmelo-Silver (2004), problem-based learning enables students to think critically, enhance analytical skills, and develop an independent or collaborative understanding. In Cycle II, students' learning outcomes further increased, with 19 out of 20 students student (5%) remained below the minimum score standard. This improvement aligns with Arends' (2012) research, which states that PBL is effective in developing higher-order thinking skills and conceptual understanding, as students become more actively engaged in exploring and applying knowledge in real-world contexts. Beyond learning outcomes, students' participation and motivation also increased significantly. In the pre-cycle, only 55% of students showed interest in learning Q.S. At-Tin. However, after implementing PBL with puzzle media, this number rose to 85% in Cycle I and reached 95% in Cycle II.

This demonstrates that engaging learning media can enhance students' motivation and enthusiasm for learning. Piaget (1972) explains that children understand concepts more easily when learning involves exploratory and enjoyable activities, such as educational games. Observations throughout the study also revealed an improvement in students' discussion and collaboration activities. In Cycle I, approximately 70% of students actively participated in group discussions, and this number increased to 90% in Cycle II. This supports the findings of Johnson & Johnson (2009), who state that cooperative learning strategies can enhance students' learning motivation, critical thinking skills, and comprehension of the material being studied.

Although the study results indicate the successful implementation of PBL with puzzle media, some challenges remain, particularly during the initial application of this method. Some students struggled to understand the concept of group discussions and the strategies for solving puzzles. However, with intensive teacher guidance, they eventually adapted to the new learning model. Vygotsky (1978) emphasizes that social interaction and teacher support are crucial in helping students build their understanding through scaffolded learning. Overall, this study proves that using Problem-Based Learning with puzzle media can significantly improve students' learning outcomes, with mastery rates increasing from 50% in the pre-cycle to 95% in Cycle II. Therefore, this method is recommended for broader implementation in Islamic religious education at the elementary school level, particularly for teaching Q.S. At-Tin and other Qur'anic studies.

REFERENCES

- Arends, R. I. (2012). *Learning to Teach* (9th ed.). McGraw-Hill.
- Barrows, H. S. (1986). A Taxonomy of Problem-Based Learning Methods. *Medical Education*, 20(6), 481-486.
- Boud, D., & Feletti, G. (1997). *The Challenge of Problem-Based Learning* (2nd ed.). Kogan Page.
- Chepbriandi, M., & Irsan, I. (2024). Penerapan Model Problem Based Learning Berbantuan Media Puzzle untuk Meningkatkan Hasil Belajar Siswa pada Materi Pecahan Kelas V SDN 106828 Sumberjo. *Jurnal Pendidikan Tambusai*, 8(1), 8713-8727.
- Darwis, U. (2023). Penerapan Model Pembelajaran Problem Based Learning dengan Media puzzle untuk Meningkatkan Hasil Belajar Siswa pada Tema Benda di Sekitarku di Kelas III SD Abdi Sukma Kota Medan. *EduGlobal: Jurnal Penelitian Pendidikan*, 2(3), 284-291.
- Fauzia, H. A. (2018). Penerapan Model Pembelajaran Problem Based Learning untuk Meningkatkan Hasil Belajar Matematika SD. *Primary: Jurnal Pendidikan Guru Sekolah Dasar*, 7(1), 40-47.

- Heruman. (2013). *Model Pembelajaran Matematika di Sekolah Dasar*. Remaja Rosdakarya.
- Iklimah, M. (2018). Pengembangan Media Pembelajaran Interaktif dengan Menggunakan Software Construct 2 pada Mata Pelajaran Elektronika Dasar di SMK Negeri 1 Sidoarjo. *Jurnal Pendidikan Teknik Elektro*, 7(1).
- Istika, S. R., Siti, I., & Nur'asiah, N. (2023). Penerapan Model Pembelajaran Problem Based Learning dengan Media Puzzle untuk Meningkatkan Hasil Belajar IPS pada Siswa Kelas V SD Negeri 39 Mataram Tahun Pelajaran 2022/2023. *Jurnal Literasi dan Pembelajaran Indonesia*, 3(2), 32–38.
- Kasri, K. (2018). Peningkatan Prestasi Belajar Matematika melalui Media Puzzle Siswa Kelas I SD. *Jurnal Pendidikan: Riset dan Konseptual*, 2(3), 320-325.
- Kunandar. (2012). *Langkah Mudah Penelitian Tindakan Kelas*. Rajawali Pers.
- Lestari, P. (2023). Peningkatan Hasil Belajar Siswa melalui Model Problem Based Learning Berbantuan Media Puzzle pada Tema Pertumbuhan dan Perkembangan Makhhluk Hidup Kelas III B SDN Rejosari 01. *Prosiding Seminar Nasional Pendidikan Profesi Guru*, 1(2), 2644–2652.
- Mallewai, I. H. (2019). Penerapan Pembelajaran Tematik bagi Guru Madrasah. *Baruga: Jurnal Ilmiah*, 9(2), 29-41.
- Munthe, B. (2015). *Desain Pembelajaran*. Pustaka Pelajar.
- Mu'min, S. A., & Yultas, N. S. (2020). Efektivitas Penerapan Metode Bermain dengan Media Puzzle dalam Meningkatkan Kemampuan Kognitif Anak. *Al-TA'DIB*, 12(2), 226.
- Nafiah, Y. N. (2014). Penerapan Model Problem-Based Learning untuk Meningkatkan Keterampilan Berpikir Kritis dan Hasil Belajar Siswa. *Jurnal Pendidikan Vokasi*, 4(1), 125-143.
- Permatasari, B. D., Gunarhadi, & Riyadi. (2019). The Influence of Problem Based Learning Towards Social Science Learning Outcomes Viewed from Learning Interest. *International Journal of Evaluation and Research in Education*, 8(1), 39–46.
- Puji, L. (2023). Peningkatan Hasil Belajar Siswa melalui Model Problem Based Learning Berbantuan Media Puzzle pada Tema Pertumbuhan dan Perkembangan Makhhluk Hidup Kelas III B SDN Rejosari 01. *Prosiding Seminar Nasional Pendidikan Profesi Guru*, 1(2), 2644–2652.
- Putra, R. D. O., Rusmawan, & Suyatini, M. M. (2022). Pengaruh Problem Based Learning Berbantu Media Puzzle terhadap Minat Belajar Siswa SD. *Jurnal Pendidikan dan Konseling (JPDK)*, 4(4), 1711–1717.
- Rafidah, H. (2025). Implementasi Model Problem Based Learning Berbantuan Media Puzzle untuk Meningkatkan Hasil Belajar Kognitif pada Mata Pelajaran IPAS Kelas IV. *Prosiding Seminar Nasional Pendidikan Profesi Guru*, 2(1), 448–455.
- Rahayu, I. S., Istianingsih, S., & Nur'asiah, N. (2023). Penerapan Model Pembelajaran Problem Based Learning dengan Media Puzzle untuk Meningkatkan Hasil Belajar IPS pada Siswa Kelas V SD Negeri 39
- Amin, Moh. (2002). "Pengantar Ilmu Pendidikan Islam", Pasuruan: PT Garoeda Buana Indah
- Purwaningrum, Septiana. (2023). "Penggunaan Media Advance Puzzle dalam Meningkatkan Kemampuan Berpikir Kritis Siswa Pada Pembelajaran PAI di Sekolah Menengah Pertama", Alimna Jurnal Pendiidkan Profesi Guru, Lptk Iain Kediri, Vol. 02. No. 01. 2023.
- Rusman. (2011). "Model-Model Pembelajaran Mengembangkan Profesionalisme Guru", Jakarta: PT Raja Grafindo Persada, h.132
- Widyanarti, Sri. (2013). "Penggunaan Media Puzzle Dalam Model Pembelajaran Langsung Untuk Meningkatkan Hasil Belajar Siswa Pada Mata Pelajaran IPS KelasVA SDN Rangkah 1 Tambaksari Surabaya", Jurnal Penelitian Pendidikan Guru Sekolah Dasar, Vol. 1 No. 1, 2013, pp. 1-5.
- Anzhani, V. A., Meiningsih, S., & Christiana, E. (2024). Penerapan Problem Based Learning

- dengan Media Puzzle Games untuk Meningkatkan Keterampilan Mengelola Emosi Siswa SMP. *Jurnal Pendidikan Tambusai*, 8(2), 26186–26193.
- Saputri, M. G., Purnamasari, V., & Nurhayati, R. (2024). Peningkatan Hasil Belajar Pendidikan Pancasila Kelas VI melalui Model Pembelajaran PBL Berbantuan Media Puzzle di SDN Sarirejo. *Pendas: Jurnal Ilmiah Pendidikan Dasar*, 9(4), 74–85.
- Sanjaya, W. (2011). *Penelitian Tindakan Kelas*. Kencana Prenada Media Group.
- Sugiyono. (2014). *Metode Penelitian Pendidikan Pendekatan Kuantitatif, Kualitatif, dan R&D*. Alfabeta.
- Sukmadinata, N. S. (2013). *Metode Penelitian Pendidikan*. Remaja Rosdakarya